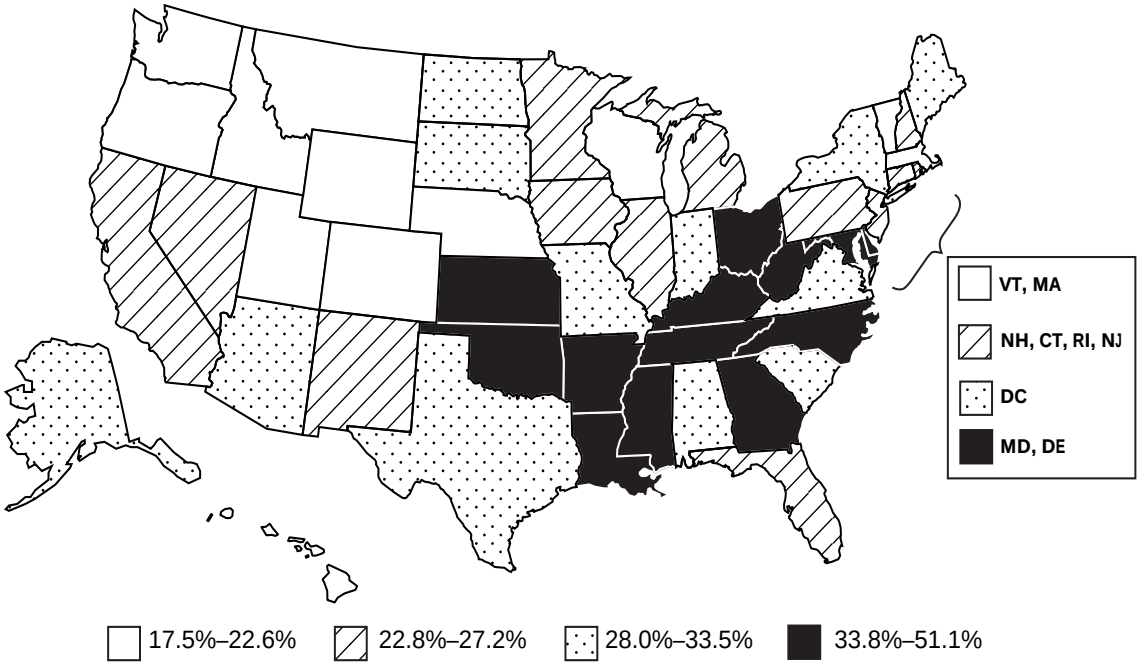
Tracking Major Health Risks Among Americans:

The Behavioral Risk Factor Surveillance System

AT-A-GLANCE
1999

Percentage of Adults Who Reported No Leisure-Time Physical Activity



Source: CDC, Behavioral Risk Factor Surveillance System, 1996.

"CDC provides a standardized product that lets us do specialized, detailed analyses. Without that product, we'd be hung up just getting the data into any kind of order. CDC's role provides an economy of scale."

BRFSS Coordinator, Washington State Department of Health

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention

CDC
CENTERS FOR DISEASE CONTROL AND PREVENTION

Surveillance of Health Risks: Foundation for Public Health Action

Surveillance is the essential underpinning for all efforts by CDC and the states to promote health and prevent disease. Surveillance is the tool that provides the necessary data to define the disease burden, identify populations at highest risk, determine the prevalence of health risks, and guide and evaluate disease prevention efforts at the national, state, and local levels.

Unlike at the beginning of this century, chronic diseases are now our nation's leading killers. Two chronic diseases, cardiovascular disease and cancer, account for almost two-thirds of all deaths among Americans. In many cases, the roots of chronic diseases are grounded in a limited number of health-damaging behaviors practiced by people every day for much of their lives. These behaviors include

- Lack of physical activity.
- Poor nutrition (e.g., high-fat, low-fiber diets).
- Tobacco use.
- Underuse of known prevention strategies, such as breast, cervical, and colorectal cancer screening.

Reducing the prevalence of these and other behaviors that endanger the health of Americans demands strategies such as public and provider education, prevention research, and policy and environmental changes that facilitate healthy living. To be effective, however, these strategies must be supported by ongoing surveillance of health risks.

CDC's Unique State-Based Surveillance System

In the early 1980s, CDC worked with the states to develop the Behavioral Risk Factor Surveillance System (BRFSS). This state-based system, the first of its kind in the world, made available information on the prevalence of risk behaviors among Americans and their perceptions and practices related to a variety of health issues.

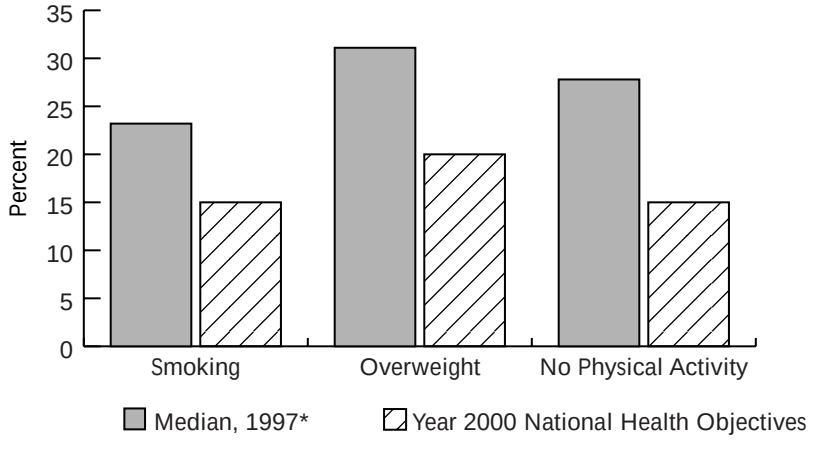
Now active in all 50 states, the BRFSS continues to be the primary source of information on major health risk behaviors among Americans. State and local health departments rely heavily on BRFSS data to

- Determine priority health issues and identify populations at highest risk.
- Develop strategic plans and target prevention programs.
- Monitor the effectiveness of intervention strategies and progress toward achieving prevention goals.
- Educate the public, the health community, and policymakers about disease prevention.
- Support community policies that promote health and prevent disease.

In addition, BRFSS data enable public health professionals to monitor progress toward achieving the nation's health objectives outlined in *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*.

BRFSS information is also used by researchers, voluntary and professional organizations, and managed care organizations to target prevention efforts. Recognizing the value of such a system in addressing priority health issues in the coming century, China, Canada, and other countries have looked to CDC for assistance in establishing BRFSS-like systems for their own populations.

Prevalence of Behavioral Risk Factors Among Adults for Cardiovascular Disease



*Data for "No Physical Activity" are from 1996.

Source: CDC, Behavioral Risk Factor Surveillance System, 1997.

Versatility of the BRFSS Benefits States

Unlike many surveillance systems, the BRFSS is flexible enough to satisfy individual state needs while also meeting information needs at the national level.

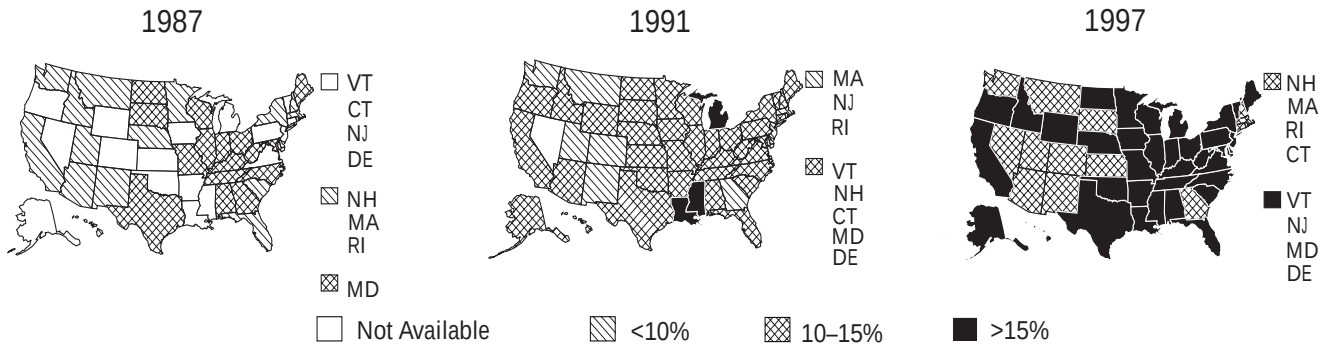
The benefits of the BRFSS for states include the following:

- Data can be analyzed in a variety of ways. BRFSS data can be analyzed by a variety of demographic variables, including age, education, income, and racial and ethnic background. The ability to determine populations at highest risk is essential in effectively targeting scarce prevention resources.
- The BRFSS is designed to identify trends over time. For example, state-based data from the BRFSS have revealed a national epidemic of obesity.
- States can add questions of special local interest. For example, following the bomb explosion at the Alfred P. Murrah Federal Building in Oklahoma City, the Oklahoma BRFSS included questions on such issues as stress, nightmares, and feelings of hopelessness so that health department personnel could better address the psychological impact of the disaster.
- States can readily address urgent and emerging health issues. Questions may be added for a wide range of important health issues, including diabetes, oral health, arthritis, tobacco use, folic acid consumption, use of preventive services, and health care coverage. In 1993, when flooding ravaged states along the Mississippi River, Missouri added questions to assess the impact of the flooding on people's health and to evaluate the capability of communities to respond to the disaster.

Although the BRFSS is flexible and allows for timely additions, standard core questions enable health professionals to make comparisons between states and derive national-level conclusions. BRFSS data have highlighted wide disparities between states on key health issues. In 1997, for example, the prevalence of current smoking among U.S. adults ranged from a low of 14% in Utah to a high of 31% in Kentucky. These data have been useful for identifying states with high rates of tobacco use and for assessing tobacco control efforts. For instance, BRFSS data revealed that the annual prevalence of cigarette smoking among adults in Massachusetts declined after an excise tax increase and antismoking campaign were implemented.

> "The BRFSS is the perfect instrument for adding state-specific questions. What else do we have for surveying the behavior of the general adult population?"
>
> —Epidemiologist,
> Connecticut Department of Public Health

Percentage of Adults Who Are Obese,* by State



*Approximately 30 pounds overweight or BMI ≥30

Source: CDC, Behavioral Risk Factor Surveillance System.

States Use BRFSS Data in a Variety of Ways

The unique and flexible qualities of the BRFSS are of great value to states. Individual states have used information from the system for many purposes, including the following:

In Arkansas, BRFSS data assessing the correlation between physical activity and hypertension among black women have been used by the Governor's Council for Physical Fitness to target special intervention and education programs.

California has used BRFSS data to demonstrate the effectiveness of the state's adult influenza immunization program.

Connecticut has used BRFSS data to support the state's lawsuit against tobacco companies to recover tobacco-related Medicaid costs and to monitor the effects of recent bicycle helmet legislation.

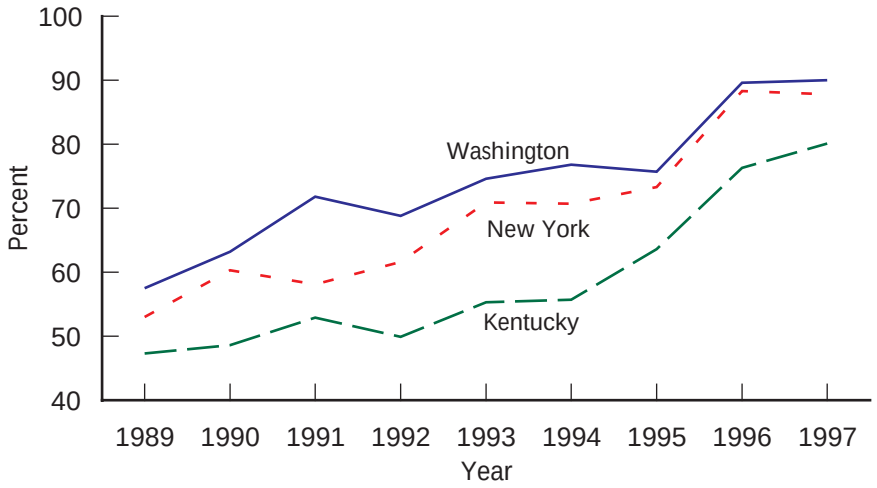
In Florida, the Cancer Control and Research Advisory Council has used BRFSS data to monitor the prevalence of cancer screening among high-risk populations in the state.

Georgia, in collaboration with the Georgia Chapter of the Arthritis Foundation, has used information from the BRFSS to assess the prevalence of arthritis and related disability in Georgia.

New York uses BRFSS data on the prevalence of regular consumption of whole milk to guide the state's Low Fat Milk campaign.

North Carolina has used BRFSS data to determine the diabetes-care-related knowledge and practices of adults with diabetes to better target education efforts.

Women Aged 50 Years or Older Who Reported Having Had a Mammogram Within the Previous 2 Years



Source: CDC, Behavioral Risk Factor Surveillance System.

For more information or additional copies of this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K–30, 4770 Buford Highway NE, Atlanta, GA 30341-3717, (770) 488-5292.
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http://www.cdc.gov/nccdphp/brfss